

ABSTRACT**Bus System having Improved Control Process**

5 The invention provides a bus system comprising a controller (1); a high speed data transfer bus (2), the data transfer bus being subject to one or more inherent physical-layer configuration constraints for proper electrical operation; and a separate control bus (14). Several devices are connected to the controller through
10 the control bus and the data transfer bus. The controller is arranged to communicate with devices using the control bus in order to verify whether or not one or more of the physical-layer configuration constraints are satisfied. If such configuration constraints are not satisfied, the controller modifies the operation
15 of some of the devices using control signals transmitted on the control bus in order to bring the data transfer bus to an operable condition.

The invention makes it possible to use the bus system, even though
20 physical-layer configuration constraints are violated. The invention applies to Rambus DRAM buses, where devices may be disabled to ensure respect of the constraint on the number of devices.

25 Figure 3.